

Speaker: Mamoru Ishii

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Title: "Msx genes function in neural crest development"

Date: Friday, December 26

Time: 15:00 P.M.~16:00 P.M.

Place: 6F Conference Room of Building C, CDB

Summary

Msx genes, members of Nk-like homeobox gene family, have been conserved widely in the metazoa. In the mouse embryo, Msx1 and Msx2 are expressed in premigratory and migratory neural crest cells as well as in the pharyngeal arches. Despite their expression patterns, the roles of Msx genes during early neural crest development have remained largely unknown because of their functional redundancy. We have found that Msx1/2 double mutant embryos exhibit defects in neural crest-derived structures caused by deficiencies in neural crest differentiation and survival. In addition, our data suggest that Msx1/2 may function in a common developmental pathway with AP-2, a transcription factor required for neural crest development, and that Msx1/2 may control AP-2 gene expression.

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